

Appln No. 09/603,834
Amdt date July 2, 2003
Reply to Office action of April 8, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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1. (canceled)
2. (currently amended) The method as set forth in claim 23 4, further comprising switching off a receiving portion of the first transmitter/receiver unit after termination of the second pre-determined time interval during a rest phase which extends until a next triggering signal.
3. (currently amended) The method as set forth in claim 23 4 or claim 2, wherein the second pre-determined time interval is shorter than the first pre-determined time interval.
4. (currently amended) The method as set forth in claim 23 4, wherein the triggering signal includes a first data set to be transmitted.
5. (currently amended) The method as set forth in claim 23 4 further comprising manually causing an emission of the triggering signal by a wearer of the implant.
6. (canceled)

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7. (currently amended) The method as set forth in claim 23 6, wherein the first acknowledgment includes a second data set to be transmitted.

8. (canceled)

9. (currently amended) The method as set forth in claim 23 8, further comprising, the first transmitter/receiver unit in response to the first control signal implementing a renewed transmission of data only if a number of renewed transmissions, which is sufficiently low to avoid overloading of a power supply of the implant is not exceeded.

10. (currently amended) The method as set forth in claim 23 8 or claim 9, further comprising for checking transmission of data by the implant in the case of plausibility of the data transmitted the second transmitter/receiver unit sending at least a part of the data transmitted to the first transmitter/receiver unit.

11. (previously amended) The method as set forth in claim 10, further comprising after checking transmission of the data by way of the first transmitter/receiver unit the implant sending a second acknowledgment to the second transmitter/receiver unit, wherein when successful transmission of the data is established the second acknowledgment includes a first signature representing validity of transmission and the

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implant closing down at least the reception readiness of the first transmitter/receiver unit.

12. (previously amended) The method as set forth in claim 11, further comprising the external apparatus implementing a second plausibility check in respect of the second acknowledgment and when lack of plausibility of the second acknowledgment is established after expiry of a further time interval after dispatch of the second acknowledgment implementing an interrogation of the implant, and after the expiry of the further time interval the implant assuming reception and transmission readiness of the first transmitter/receiver unit for a renewed further time interval which is sufficient to receive and answer an inquiry from the external apparatus, and effecting an answer to the inquiry by renewed sending of the second acknowledgment and/or the data which were sent last.

13. (currently amended) The method as set forth in claim 23 1, further comprising when defective transmission of data is established, effecting a renewed transmission of data by the first transmitter/receiver unit if a number of renewed transmissions, which is sufficiently low to avoid overloading of an energy supply of the implant, is not exceeded.

14. (currently amended) The method as set forth in claim 23 1, further comprising effecting renewed transmission after expiry of a waiting time interval, wherein in the case of

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multiple renewed transmission the length of the waiting time interval increases.

15. (currently amended) The method as set forth in claim 23 4, further comprising after renewed transmission of data by the first transmitter/receiver unit executing again the method steps beginning with a plausibility check.

16. (currently amended) The method as set forth in claim 23 4, wherein the second transmitter/receiver unit is substantially permanently ready to receive in an initial condition up to a first data exchange with the implant and at least during the first data exchange reduces the transmission or reception readiness of the second transmitter/receiver unit to a periodic transmission or reception readiness interval, wherein the second transmitter/receiver unit is synchronized with the first transmitter/receiver unit in such a way that the transmission or reception readiness intervals of the first transmitter/receiver unit and second transmitter/receiver unit overlap.

17. (previously amended) The method as set forth in claim 16, further comprising upon nonreceipt of transmissions of the first transmitter/receiver unit at the second transmitter/receiver unit over a predetermined number of transmission or reception readiness intervals of the second transmitter/receiver unit prolonging transmission or reception

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readiness interval of the second transmitter/receiver unit to catch a divergence drift of synchronicity.

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18. (currently amended) The method as set forth in claim 23 4, wherein at least the first pre-determined time interval is variable during operation by sending a second item of control information by the second transmitter/receiver unit to the first transmitter/receiver unit which is ready to receive.

19. (currently amended) The method as set forth in claim 23 4, wherein the first pre-determined time interval is varied in dependence on operating parameters of the implant.

20. (currently amended) The method as set forth in claim 23 4, further comprising when appropriate operating parameters of the implant apply, the first transmitter/receiver unit emits an emergency triggering signal to the second transmitter/receiver unit for triggering an alarm signal.

21. (Currently amended) An electromedical apparatus for data transmission comprising:

an electromedical implant having a first transmitter/receiver unit; and

an associated external apparatus having a second transmitter/receiver unit;

the first transmitter/receiver unit beginning data transmission by sending periodically a triggering signal to the

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second transmitter/receiver unit repetitively at the end of in a
first pre-determined time interval, and

at least a reception readiness of the first transmitter/receiver unit being maintained after emission of the triggering signal for a second pre-determined time interval;

wherein a comparison of the first pre determined time interval with the second pre determined time interval provides a fixed time interval ratio indicative of energy saving characteristics; the external apparatus implements a first plausibility check of data transmitted by the first transmitter/receiver unit; and

wherein a first acknowledgment is sent by the second transmitter/receiver unit to the first transmitter/receiver unit upon receipt of the triggering signal, the first acknowledgment including:

at least one first item of control information for controlling the reception readiness of the first transmitter/receiver unit; and

a second item of control information for control of the first transmitter/receiver unit such that, in the event of lack of plausibility of the data transmitted, the second item of control information includes a first control signal for triggering a renewed transmission of data by the first transmitter/receiver unit.

22. (previously amended) The apparatus as set forth in claim 21, wherein at least a receiving portion of the first transmitter/receiver unit remains switched off after termination

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of the second pre-determined time interval during a rest phase which extends up to a next triggering signal.

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23. (New) A method of data transmission between an electromedical implant having a first transmitter/receiver unit and an associated external apparatus having a second transmitter/receiver unit, comprising:

beginning data transmission with a triggering signal sent by the first transmitter/receiver unit to the second transmitter/receiver unit repetitively at the end of a first pre-determined time interval; and

after emission of the triggering signal, maintaining a reception readiness of the first transmitter/receiver unit for a second pre-determined time interval;

implementing by the external apparatus a first plausibility check of data transmitted by the first transmitter/receiver unit; and

sending a first acknowledgment by the second transmitter/receiver unit to the first transmitter/receiver unit upon receipt of the triggering signal;

wherein the first acknowledgment includes:

at least one first item of control information for controlling the reception readiness of the first transmitter/receiver unit; and

a second item of control information for control of the first transmitter/receiver unit such that, in the event of lack of plausibility of the data transmitted, the second item of control information includes a first control signal for

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triggering a renewed transmission of data by the first transmitter/receiver unit.